Annual Air Emission Inventory and Emission Statement

SPRAGUE ENERGY - SEARSPORT TERMINAL

General Facility Information

Facility ID:	**2302700022**	Inventory Year:	**2012**
Facility Name:	**SPRAGUE ENERGY - SEARSPORT TERMINAL**	Operating Status:	**Operating**
Description:	**PETROLEUM STORAGE**	Operating Status Year:	**2012**
NAICS Code:	**424710**	NAICS Description:	**Petroleum Bulk Stations and Terminals**
Parent Company:	**SPRAGUE OPERATING RESOURCES LLC**	Facility Category:	**Synthetic Minor**
Street Address:	**MACK POINT - TRUNDY RD**	Mailing Address:	**TWO INTERNATIONAL DR STE 200**
	SEARSPORT, ME 04974		**PORTSMOUTH, NH 03802**
Air License Number:	**A-000097**	Air License Expiration Date:	
Latitude:	**44.439426**	Longitude:	**-68.887132**
Comment:	**no comment**		

Exhaust Points

Exhaust Point ID	Description	Type	Operating Status
EXH101	**FUGITIVE**	**Fugitive**	**Operating**
EXH002	**Generator Stack**	**Vertical**	**Operating**
EXH001	**Stack #1**	**Vertical**	**Operating**

Emissions Unit

Unit ID:	**028**	Operating Status:	**Operating**
Description:	**BOILER 1**	Operating Status Year:	**2012**
Unit Type/Desc:	**100 Boiler**		
Design Capacity:	**29.4 E6BTUHR**		
Comment:	**no comment**		

2012 Operating Details

Hours Per Day	Days Per Week	Weeks Per Year	Hours Per Year	Summer Operating Days
			5977	

Process

Process ID:	**028-1**	Description:	**#6 FUEL OIL / BUNKER C**
Comment:	**no comment**		
SCC Code:	**10200401**	Material Code:	**Residual Oil - No. 6**
Material IO Code:	**I (Burned)**	Material UOM Code:	**Thousands of Gallons**

2012 Throughput

Annual	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
277.72	24.368	21.962	26.749	23.188	29.056	0	2.061	34.444	31.442	24.865	32.498	27.087

Emissions

Pollutant Code	Pollutant Description	Type	Method	Emission Factor	Process Emissions Tons/Yr
NH3	Ammonia	CAP	EPA Emission Factor (no Control Efficiency used)	0.8 LB/E3GAL	0.11108801
CO	Carbon Monoxide	CAP	EPA Emission Factor (no Control Efficiency used)	5.0 LB/E3GAL	0.6943
7439921	Lead	CAP	Trade Group Emission Factor (no Control Efficiency used)	0.0042 LB/E3GAL	5.8321195E-4
NOX	Nitrogen Oxides	CAP	Trade Group Emission Factor (no Control Efficiency used)	55.0 LB/E3GAL	7.6373
PM10-FIL	Particulate Matter, 10 microns, filterable	CAP	Trade Group Emission Factor (no Control Efficiency used)	6.67 LB/E3GAL	0.9261962
PM25-FIL	Particulate Matter, 2.5 microns, filterable	CAP	Trade Group Emission Factor (no Control Efficiency used)	4.34 LB/E3GAL	0.60265243

SO2	Sulfur Dioxide	CAP	EPA Emission Factor (no Control Efficiency used)	157.0 LB/E3GAL	10.355484
VOC	Volatile Organic Compounds	CAP	Trade Group Emission Factor (no Control Efficiency used)	0.28 LB/E3GAL	0.038880803
124389	Carbon Dioxide	GHG	State/Local Emission Factor (no Control Efficiency used)	25873.0 LB/E3GAL	3592.7249
74828	Methane	GHG	State/Local Emission Factor (no Control Efficiency used)	1.07 LB/E3GAL	0.14858021
10024972	Nitrous Oxide	GHG	State/Local Emission Factor (no Control Efficiency used)	0.11 LB/E3GAL	0.0152746

Control Approaches for BOILER 1

Control Approaches Not Reported

Exhaust Point Apportionments for BOILER 1

Exhaust Point ID	Exhaust Point Desc	Apportionment ID	Avg % Emissions	Comment
EXH001	**Stack #1**	**2302700022028001**	**100.0**	

Emissions Unit

Unit ID:	**030**	Operating Status:	**Operating**
Description:	**BOILER 2**	Operating Status Year:	**2012**
Unit Type/Desc:	**100 Boiler**		
Design Capacity:	**29.4 E6BTUHR**		
Comment:	**no comment**		

2012 Operating Details

Hours Per Day	Days Per Week	Weeks Per Year	Hours Per Year	Summer Operating Days
			6647	

Process

Process ID:	**030-1**	Description:	**#6 FUEL OIL / BUNKER C**
Comment:	**no comment**		
SCC Code:	**10200401**	Material Code:	**Residual Oil - No. 6**
Material IO Code:	**I (Burned)**	Material UOM Code:	**Thousands of Gallons**

2012 Throughput

Annual	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
365.838	33.858	30.432	25.336	32.165	44.908	54.117	48.399	10.8	29.528	21.301	16.656	18.338

Emissions

Pollutant Code	Pollutant Description	Type	Method	Emission Factor	Process Emissions Tons/Yr
NH3	Ammonia	CAP	EPA Emission Factor (no Control Efficiency used)	0.8 LB/E3GAL	0.1463352
CO	Carbon Monoxide	CAP	EPA Emission Factor (no Control Efficiency used)	5.0 LB/E3GAL	0.914595
7439921	Lead	CAP	Trade Group Emission Factor (no Control Efficiency used)	0.0042 LB/E3GAL	7.682598E-4
NOX	Nitrogen Oxides	CAP	Trade Group Emission Factor (no Control Efficiency used)	55.0 LB/E3GAL	10.060545
PM10-FIL	Particulate Matter, 10 microns, filterable	CAP	Trade Group Emission Factor (no Control Efficiency used)	6.67 LB/E3GAL	1.2200698
PM25-FIL	Particulate Matter, 2.5 microns, filterable	CAP	Trade Group Emission Factor (no Control Efficiency used)	4.34 LB/E3GAL	0.79386854

SO2	Sulfur Dioxide	CAP	EPA Emission Factor (no Control Efficiency used)	157.0 LB/E3GAL	13.641185
VOC	Volatile Organic Compounds	CAP	Trade Group Emission Factor (no Control Efficiency used)	0.28 LB/E3GAL	0.051217325
124389	Carbon Dioxide	GHG	State/Local Emission Factor (no Control Efficiency used)	25873.0 LB/E3GAL	4732.6636
74828	Methane	GHG	State/Local Emission Factor (no Control Efficiency used)	1.07 LB/E3GAL	0.19572334
10024972	Nitrous Oxide	GHG	State/Local Emission Factor (no Control Efficiency used)	0.11 LB/E3GAL	0.02012109

Control Approaches for BOILER 2

Control Approaches Not Reported

Exhaust Point Apportionments for BOILER 2

Exhaust Point ID	Exhaust Point Desc	Apportionment ID	Avg % Emissions	Comment
EXH001	**Stack #1**	**2302700022030001**	**100.0**	

Emissions Unit

Unit ID:	**031**	Operating Status:	**Operating**
Description:	**CONVEYOR BELTS / SCOOPS**	Operating Status Year:	**2012**
Unit Type/Desc:	**780 Silo**		
Design Capacity:			
Comment:	**no comment**		

2012 Operating Details

Hours Per Day	Days Per Week	Weeks Per Year	Hours Per Year	Summer Operating Days
24	7	52	8736	91

Process

Process ID:	**031-1**	Description:	**MATERIAL CONVEYING**
Comment:	**Process is included because of opacity limit only.**		
SCC Code:	**30510198**	Material Code:	**Material**
Material IO Code:	**I (Conveyed)**	Material UOM Code:	**Tons**

2012 Throughput

Annual	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0	0	0	0	0	0	0	0	0	0	0	0	0

Emissions

Pollutant Code	Pollutant Description	Type	Method	Emission Factor	Process Emissions Tons/Yr
PM10-FIL	Particulate Matter, 10 microns, filterable	CAP	Engineering Judgement / Manual Calculation		0.0

Comment: No quantifiable emissions. Opacity limits only.

Control Approaches for CONVEYOR BELTS / SCOOPS

Control Approaches Not Reported

Exhaust Point Apportionments for CONVEYOR BELTS / SCOOPS

Exhaust Point ID	Exhaust Point Desc	Apportionment ID	Avg % Emissions	Comment

EXH101	FUGITIVE	2302700022031101	100.0

Emissions Unit

Unit ID:	**032**	Operating Status:	**Operating**
Description:	**DEGREASER**	Operating Status Year:	**2012**
Unit Type/Desc:	**430 Degreaser**		
Design Capacity:			
Comment:	**no comment**		

2012 Operating Details

Hours Per Day	Days Per Week	Weeks Per Year	Hours Per Year	Summer Operating Days
24	7	52	8736	91

Process

Process ID:	**032-1**	Description:	**SOLVENT**
Comment:	**no comment**		
SCC Code:	**40100296**	Material Code:	**Degreaser**
Material IO Code:	**I (Used)**	Material UOM Code:	**Gallons**

2012 Throughput

Annual	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
120	0	0	0	0	0	0	0	0	0	0	0	0

Emissions

Pollutant Code	Pollutant Description	Type	Method	Emission Factor	Process Emissions Tons/Yr
VOC	Volatile Organic Compounds	CAP	Engineering Judgement / Manual Calculation		0.039

Comment: Emissions are conservatively estimated at 10% of the amount of solvent that was added to the unit in CY2012.

Control Approaches for DEGREASER

Control Approaches Not Reported

Exhaust Point Apportionments for DEGREASER

Exhaust Point ID	Exhaust Point Desc	Apportionment ID	Avg % Emissions	Comment
EXH101	**FUGITIVE**	**2302700022032101**	**100.0**	

Emissions Unit

Unit ID:	**022**	Operating Status:	**Operating**
Description:	**EMERGENCY DIESEL GENERATR**	Operating Status Year:	**2012**
Unit Type/Desc:	**160 Reciprocating IC Engine**		
Design Capacity:	**1.46 E6BTUHR**		
Comment:	**no comment**		

2012 Operating Details

Hours Per Day	Days Per Week	Weeks Per Year	Hours Per Year	Summer Operating Days
			67	

Process

Process ID:	**022-1**	Description:	**#2 FUEL OIL / DIESEL**
Comment:	**no comment**		
SCC Code:	**20300101**	Material Code:	**Distillate Oil - Diesel**
Material IO Code:	**I (Burned)**	Material UOM Code:	**Thousands of Gallons**

2012 Throughput

Annual	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
0.4334	0	0	0	0	0	0	0	0	0	0	0	0

Emissions

Pollutant Code	Pollutant Description	Type	Method	Emission Factor	Process Emissions Tons/Yr
NH3	Ammonia	CAP	Site-specific Emission Factor	0.8 LB/E3GAL	1.7336001E-4
CO	Carbon Monoxide	CAP	Site-specific Emission Factor	131.1 LB/E3GAL	0.028409373
7439921	Lead	CAP	State/Local Emission Factor (no Control Efficiency used)	0.00126 LB/E3GAL	2.7304202E-7
NOX	Nitrogen Oxides	CAP	Site-specific Emission Factor	608.6 LB/E3GAL	0.13188362
PM10-FIL	Particulate Matter, 10 microns, filterable	CAP	Site-specific Emission Factor	17.25 LB/E3GAL	0.003738075
PM25-FIL	Particulate Matter, 2.5 microns, filterable	CAP	Site-specific Emission Factor	17.25 LB/E3GAL	0.003738075
SO2	Sulfur Dioxide	CAP	Site-specific Emission	141.0 LB/E3GAL	4.5832054E-5

			Factor		
VOC	Volatile Organic Compounds	CAP	Site-specific Emission Factor	48.3 LB/E3GAL	0.01046661
124389	Carbon Dioxide	GHG	State/Local Emission Factor (no Control Efficiency used)	22680.0 LB/E3GAL	4.914756
74828	Methane	GHG	State/Local Emission Factor (no Control Efficiency used)	0.06 LB/E3GAL	1.3002E-5
10024972	Nitrous Oxide	GHG	State/Local Emission Factor (no Control Efficiency used)	0.13 LB/E3GAL	2.8171E-5

Control Approaches for EMERGENCY DIESEL GENERATR

Control Approaches Not Reported

Exhaust Point Apportionments for EMERGENCY DIESEL GENERATR

Exhaust Point ID	Exhaust Point Desc	Apportionment ID	Avg % Emissions	Comment
EXH002	**Generator Stack**	**2302700022022002**	**100.0**	

Completeness Report

Inventory Item	Check Number	Check Name	Description	Error Level	Justification
No Completeness Check Results To Report					

Facility Emissions

CAS NO.	Pollutant Description	Tons/Yr
	Volatile Organic Compounds	0.13956474
	Sulfur Dioxide	23.996716
	Particulate Matter, 2.5 microns, filterable	1.400259
	Particulate Matter, 10 microns, filterable	2.1500041
	Nitrogen Oxides	17.82973
7664-41-7	Ammonia	0.25759658
	Carbon Monoxide	1.6373044
74-82-8	Methane	0.34431654
7439-92-1	Lead	0.0013517448
124-38-9	Carbon Dioxide	8330.304
10024-97-2	Nitrous Oxide	0.03542386